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# soundings

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## Hull fouling - the practical and the legal

**Hull fouling is an age old problem for ships subjected to extended stays in warmer waters. Despite the use of modern technology in anti fouling paints it is difficult to avoid marine growth when a ship is stationary for a prolonged period and the Managers continue to see a number of charterparty disputes arising as a consequence of hull fouling.**

### The practical

The Association has recently been involved with a claim for a Member where Dr R.N. Bamber of Artoo Marine Consultants was retained to provide an expert's view on the issue of hull fouling. His advice is summarised below.

As Members will no doubt be aware barnacles probably represent the dominant group of ship-fouling organisms. They colonise hard substrata, predominantly rocks, via dispersive larvae in the plankton. The larvae of certain "fouling" species settle equally readily on man-made structures such as jetties and oil rigs, as well as on a ship's hull and on flotsam. This propensity to colonise on a ship's hull and other floating materials has facilitated the dispersion of barnacles around the world.

Tropical and subtropical barnacles are capable of reaching maturity within a matter of weeks and, having been transported to a new location, can release free-swimming larvae which, if the local conditions are appropriate, can settle and may form new breeding populations. Many species of barnacles are now effectively distributed world-wide in warm temperature seas.

In terms of the rate of growth on a ship's hull, experts conclude that newly settled barnacles have been found to grow up to 10mm high within fourteen to twenty days at water temperatures of 25 - 29 degrees Celsius. Studies have shown that growth in a common species of barnacle is fastest during their early days of settlement and the average lifespan is estimated to vary between four months in the Mediterranean to twenty-two months in South Africa and Argentina.

Ships will typically have anti fouling paint applied to the hull. Self polishing anti

fouling coatings work by the continual renewal of the surface layer during movement of the ship through the water. Barnacles do not settle or feed at water velocities much above two knots. When the ship is not moving and sits idle, the coatings are generally accepted to be functional in resisting fouling for up to twelve to fourteen days.

The accumulation of marine growth on a ship's hull in warm tropical waters, typically when a ship remains waiting at anchor for a period of more than three to four weeks, often results in a subsequent significant reduction in a ship's speed, and an impairment of the ship's performance. This has obvious implications under a time charter between an owner and a charterer, including speed and performance disputes, claims arising from the loss of time whilst the ship's hull is cleaned and the actual cleaning costs.



# Hull fouling - the practical and the legal

## The legal

Given the very real risk of hull fouling to a ship which remains idle in warm waters, it is not surprising that these types of claims have become more prevalent. Remarkably however, there have been very few English law cases reported on disputes surrounding hull fouling. The two leading cases are *Santa Martha Baay Scheepvaart & Handelsmaatschappij N.V. v Scanbulk A/S 1981* ("The Rijn"), and *Action Navigation v Bottiglieri Navigation Inc, 2005* ("The Kitsa"), both of which were decided a number of years ago, but which still remain the leading cases on the subject.

In the case of *The Rijn*, the owner let the ship to a charterer under a time charter for about four months, twenty days more or less in charterer's option. The ship was delayed for forty-two days at Lourenco Marques where the ship's hull suffered considerable fouling which affected her speed. The charterer claimed that the ship underperformed on the subsequent voyage and placed the ship off hire. The owner rejected these arguments and submitted that the hull fouling arose as a consequence of charterer's orders.

The English High Court held that the hull fouling suffered by the ship during the delay at the loading port was a natural consequence of the ship remaining in service and there was nothing fortuitous about it. The Court therefore found it a fair inference that the excessive hull fouling stemmed from the abnormally long period that the ship spent at Lourenco Marques and, since it was the charterer's option to keep the ship in tropical waters for nearly three months, it would be unjust for the charterer to seek financial relief for the natural consequences of the delay.

Accordingly the Court rejected the charterer's underperformance claim against the owner.

In relation to whether the ship was on or off-hire during the cleaning period, the Court held that the accumulation of marine growth during the contract of service could not be considered a 'defect' in the hull, within the meaning of the wording of the unamended clause 15 of the NYPE time charterparty form. The Court therefore held the ship remained on hire for the time spent for hull cleaning.

In the more recent case of *The Kitsa* (which involved the Association) the owner time chartered the ship for a period of four to six months (later extended to about seven to nine months) on an amended NYPE charterparty form. The ship was then the subject of various sub-charters on materially back to back terms, ultimately for a time charter trip for the carriage of coal from South Korea to Visakhapatnam ("Visak") in India. The ship was delayed at Visak for over three weeks during which time the hull became seriously fouled. The owner undertook de-fouling work, and claimed the costs from the charterer on the basis that such costs were covered by an implied indemnity in the charterparty. It was common ground that by operation of clause 8 of the NYPE charter, and the wide trading limits usually written into a charterparty, there was an implied indemnity to the effect that the charterer was to indemnify the owner against the consequences of complying with charterer's orders as to the employment of the ship.

The matter was first determined by London arbitration, and then by the English High Court. The Court confirmed its agreement with the arbitration award, which found that the charterer was not

liable for the de-fouling costs. It found as a question of fact that although the cargo might have been discharged at Visak in a shorter time, it was not outside an owner's reasonable expectation that the ship might spend three weeks there in the entirely ordinary course of employment.

The Court found that the risk of the ship suffering hull fouling by being inactive in a warm water port as a result of a legitimate order of the charterer was foreseeable, and in fact foreseen by both sides at the time the charterparty was entered into. The Court therefore held that the cost of de-fouling was not within the scope of the implied indemnity under the charterparty, but an ordinary expense of trading and so for the owner's account; furthermore, that the ship was to remain off hire for the duration of the de-fouling operations and that any underperformance claim advanced by charterers under this voyage was to be allowed.

## Conclusion

While the cases of *The Rijn* and *The Kitsa* are distinguishable on their facts, it is apparent that disputes relating to hull fouling generally seem to revolve around the length of the delay the ship suffers, unless an additional clause or term in the charterparty affects the legal position in this respect.

Where the delay is much the same as the delay in *The Kitsa* (three weeks) then the Managers' advice is generally that the owner may well be found to have accepted the risk of the fouling, and so may be held liable for any underperformance of the ship and associated losses. If however the delay is a greater period then responsibility may well shift to the charterer as it is doubtful that the owner would have contemplated and/or foreseen such a severely extended stay in warm waters, and would have accepted the resulting risk of fouling to the ship's hull and associated loss of time and costs incurred.

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